Appl. No. 10/554,006 Amdt. dated March 31, 2009 Reply to Office action of July 1, 2008

## REMARKS

Reconsideration is respectfully requested. Claims 1-3 were present in the application and are amended herein. New claims 4-9 are added. Support for the language of claims 4, 6, 8 and 10-15 is found in the specification as filed at page 7, 2<sup>nd</sup> full paragraph, line 4, and at page 12, last full paragraph on the page, line 5. Support for the language of claims 5, 7 and 9 is found at page 5, bottom paragraph, line 2.

Claims 1-3 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable. Claims 1 and 3 are rejected as being obvious over the combination of US 7088824 (Takeuchi) as combined with 6545791 (McCaughan et al). Claim 2 is rejected over this same combination, with the further addition of US5866911 (Baer).

Applicant respectfully traverses.

Claims 1-3 are amended to add that the photon detector employs a long gating period, while new claims 4, 6, 8 and 10-15 set out particular values of the gating period.

The long gate period raises the probability of capture of one photon of the photon pair. Takeuchi is silent as to this concept and feature, and McCaughan and Baer add nothing that would teach or suggest this, and accordingly the documents and their combination do not teach or suggest the claims.

New claims 5, 7 and 9 add that the laser is a CW laser.

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It is therefore respectfully submitted that claims 1-15 are patentable and the combination of McCaughen, Baer and Takeuchi does not teach or suggest the claims, nor would the documents teach or suggest the claims when considered alone.

In light of the above noted amendments and remarks, this application is believed in condition for allowance and notice thereof is respectfully solicited. The Examiner is asked to contact applicant's attorney at 503-224-0115 if there are any questions.

It is believed that the required fees are being submitted herewith. However, if additional fees are required to keep the application pending, please charge deposit account 503036. If fee refund is owed, please refund to deposit account 503036.

Respectfully, submitt

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